

## **Abstract**

Methods and systems are directed to authenticating a client over a  
5 network. The client generates a certificate and sends it to a server through a trusted  
mechanism. The server is configured to store the received certificate. When the client  
requests authentication over the network, it provides the certificate again, along with a  
parameter associated with a secure session. The server verifies the parameter associated  
with the secure session and determines if the certificate is substantially the same as the  
10 stored certificate. The server authenticates the client over the network, if the certificate is  
determined to be stored. In another embodiment, the client transmits the certificate that  
is generated by a third party Certificate Authority (CA) based, in part, on the client's  
public key.

Customer No. 38879